IN THE CLAIMS

1. **(currently amended)** A bearer integration method for integrating a plurality of bearer services into a wireless channel by performing time-division multiplexing/demultiplexing, said bearer integration method comprising the steps of:

inputting each bearer frame of a bearer service in synchronization with reference frame timing of a period T in a sending side;

delaying each bearer frame of said bearer service by one frame period by allocating delays A ($0 < A < T$) and A' ($= T - A$) between the sending side and a receiving side wherein the delay A is allocated in the sending side as a frame offset and the delay A' is allocated in the receiving side, and wherein the sending side and the receiving side are synchronized with the reference frame timing of the period T;

outputting each bearer frame of said bearer service in the receiving side; and

integrating said bearer service into a wireless channel with another bearer service in which delays B ($A < B < T$) and B' ($= T - B$) are allocated between the sending side and the receiving side wherein the delay B is allocated in the sending side as a frame offset and the delay B' is allocated in the receiving side.

2. (original) The bearer integration method as claimed in claim 1, wherein, when integrating bearer service in which each bearer service has different delay allocation, said bearer services are integrated into a wireless channel which has a delay equal to or larger than the maximum delay in said bearer services.

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3. (original) The bearer integration method as claimed in claim 1, wherein two kinds and two systems of delay allocation are set for each bearer service, said bearer integration method further comprising the step of:

integrating one or more bearer services having any delay allocation into another bearer service having any delay allocation.

4. **(currently amended)** A bearer integration method for integrating a plurality of bearer services into a wireless channel by performing time-division multiplexing/demultiplexing, said bearer integration method comprising the steps of:

inputting each bearer frame of a bearer service in synchronization with reference frame timing of a period T in a sending side;

delaying each bearer frame of said bearer service by two frame period by allocating delays A ($0 < A < T$) and A' ($= 2T - A$) between the sending side and a receiving side wherein the delay A is allocated in the sending side as a frame offset and the delay A' is allocated in the receiving side, and wherein the sending side and the receiving side are synchronized with the reference frame timing of the period T;

outputting each bearer frame of said bearer service in the receiving side; and

integrating said bearer service into a wireless channel with another bearer service in which delays T+B ($0 < B < T$) and B' ($= T - B$) are allocated between the sending side and the receiving side wherein the delay B is allocated in the sending side as a frame offset and the delay B' is allocated in the receiving side.

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5. (previously presented) The bearer integration method as claimed in claim 4, further comprising the step of:

integrating a first bearer service, in which delays A ($0 <= A <= T$) and A ' ($= 2T - A$) are associated, with a second bearer service, in which delays B ($0 <= B <= T$) and B' ($= 2T - B$) are allocated between the sending side and the receiving side, into a wireless channel C, in which delays $T + C$ ($0 <= C <= T$) and C' ($= T - C$) are allocated.

6. (previously presented) The bearer integration method as claimed in claim 5, wherein two kinds and two systems of delay allocation are set for each bearer service, said bearer integration method further comprising the steps of:

delaying, in the sending side, a first bearer frame of said first bearer service which is input after bearer integration timing by a period of $T + C$, delaying bearer frames of said first bearer service after a second bearer frame by a period C;

delaying, in the sending side, bearer frames of said second bearer service after a third bearer frame of said second bearer service which is input after bearer integration timing by a period C, integrating the first and the second bearer services into the wireless channel C and sending integrated data;

delaying, in the receiving side, the first bearer frame by a period $T - C$, delaying said bearer frames after the second bearer frame by a period $2T - C$, and outputting these bearer frames; and

delaying, in the receiving side, said bearer frames of said second bearer service after the third bearer frame by a period $2T - C$ and outputting said bearer frames.

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7. (previously presented) The bearer integration method as claimed in claim 1, wherein a point of delay allocation between the sending side and the receiving side corresponds to frame offset timing.

8. (previously presented) A bearer integration method for integrating a plurality of bearer services into a wireless channel by performing time-division multiplexing/demultiplexing, said bearer integration method comprising the steps of:

obtaining a delay margin DM which can be allocated between a sending side and a receiving side by subtracting a system delay from a maximum allowable delay defined by a service quality;

When DM >= 2T in which T is a reference frame period, performing a bearer integration method comprising the steps of: delaying input bearer service data by two frame periods by allocating delays A (0 <= A <= T) and A' (= 2T – A); and integrating said bearer service data into a wireless channel with another bearer service data in which delays T + B (0 <= B <= T) and B' (= T – B) are allocated, or, performing a bearer integration method for integrating a bearer service in which delays A (0 <= A <= T) and A' (= 2T – A) are allocated with another bearer service data in which delays B (0 <= B <= T) and B' (= 2T – B) are allocated between the sending side and the receiving side into a wireless channel C in which delays T + C (0 <= C <= T) and C' (= T – C) are allocated;

When T <= DM < 2T, performing a bearer integration method comprising the steps of: delaying input bearer service data by one frame period by allocating delays A (0 <= A <= T) and A' (= T – A); and integrating said bearer service data into a wireless channel with another bearer service data in which delays B (A <= B <= T) and B' (= T – B) are allocated; and

When DM < T, performing a bearer integration method in which no delay is allocated between the sending side and the receiving side.

9. (original) The bearer integration method as claimed in claim 8, further comprising the step of:

determining a bearer integration method to be performed by checking conditions in order of DM >= 2T, T <= DM < 2T, DM < T.

10. (original) The bearer integration method as claimed in claim 8, further comprising the step of:

storing a bearer integration method used before;

determining a bearer integration method to be used according to said bearer integration method which is stored.

11. (original) The bearer integration method as claimed in claim 10, further comprising the step of:

when a delay margin of a bearer service to be integrated is smaller than a delay due to said bearer integration method which is stored, selecting a bearer integration method which has a delay suitable for said delay margin of said bearer service to be integrated.

12. **(currently amended)** A communication system which integrates a plurality of bearer services into a wireless channel by performing time-division multiplexing/demultiplexing, said communication system comprising:

a send delay adding part which synchronizes with reference frame timing of a period T, delays each bearer frame of one or more bearer services input before bearer integration timing up to each frame offset timing, and delays each bearer frame of the one or more bearer services input after bearer integration timing up to frame offset timing of a channel for bearer integration; and

a bearer data multiplexing part which time-division multiplexes bearer frames of the one or more bearer service output from said send delay adding part, wherein the bearer frames that are multiplexed are transmitted via a wireless channel;

a bearer data separation part which time-division demultiplexes the bearer frame of the one or more bearer services that are multiplexed received via the wireless channel; and

a receive delay adding part which synchronizes with the reference frame timing, delays each bearer frame of the one or more bearer services input before bearer integration timing up to a closest reference frame timing, and delays each bearer frame of the one or more bearer services output from said bearer data separation part after bearer integration timing up to the closest reference frame timing.

13. (canceled)

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